Connecting Communities to High-Speed Growth

MOTOROLA

Canopy® HotZone is the breakthrough wireless broadband mesh solution that helps fuel new economic development and sustained community growth. The network enables municipalities of all sizes to make cost-effective, high-speed wireless connectivity available to virtually every business and resident.

Enabling Economic and Personal Growth through a Single Cost-Effective Solution

Governing any municipality is an awesome responsibility. Municipal officials must plan and manage for sustained overall growth that keeps their communities vital and prosperous. At the same time, they must help provide increasing personal growth opportunity for each individual resident and business. For municipalities of all sizes—and the service providers who partner with them—the Canopy HotZone* network, part of Motorola's Mesh Solutions portfolio, meets crucial community, business and personal communication needs.

Community and Enterprise Applications

The network delivers high-speed public access and seamless mobility that empower residents, businesses, nomadic users, visitors and municipal workers. Canopy HotZone is also an ideal solution for enterprise and campus environments including corporate, utility, healthcare, education and more. A wireless broadband network can help promote communication, information sharing, collaboration and overall productivity. It can also help tighten security and improve employee and customer relations.

21st Century Benefits

The Canopy HotZone mesh network is accessible through standard 802.11b/g devices and was developed specifically for outdoor Metro WiFi applications. Cities, towns, counties and other municipalities can all become more desirable places to live and work by using Canopy HotZone to:

- **Conquer the Digital Divide.** Virtually every community faces a digital divide in which only more affluent economic groups can afford high-speed Internet access. Canopy HotZone eliminates this gap by making affordable or free wireless broadband access available to every citizen and business.

- **Create Economic Growth.** Every community is competing with other communities to attract new business and spur ongoing economic development. Offering affordable wireless broadband access to every new or relocating business provides a distinct advantage over non-connected communities.

- **Streamline Public Services.** Canopy HotZone networks offer communities of all sizes the opportunity to substantially lower public service costs, increase the efficiency of municipal workers and streamline and improve community public services.

The Canopy HotZone Edge

The Canopy HotZone solution is one of the fastest, most cost-effective, simplest and most comprehensive wireless broadband public access solutions available today.

- **Affordability.** Canopy HotZone is an affordable mesh network option requiring low capital equipment expenditures and deployment costs resulting in a cost of ownership about half that of other systems.

- **Fast Implementation.** The elegant simplicity of Canopy HotZone technology makes it possible to install and configure a network in days rather than weeks or months.

- **Reliability.** Canopy HotZone's high performance and reliability are based on redundancy where necessary, routing intelligence, self-healing technology and remarkable interference rejection capabilities.

- **Security.** Canopy HotZone networks provide multiple layers of security utilizing AES, WPA, WEP, VPNs and HTTPS for customers who need optimum security.

- **Scalability.** With Canopy HotZone, municipalities can start small and expand coverage as needs and populations grow.

- **Motorola Confidence.** Motorola offers Canopy HotZone customers the benefits of over 75 years of global leadership in wireless technology and networking, as well as industry leading design, planning, implementation and customer support services.

* Powered by Tropos MetroMesh

The Metro WiFi Industry's End-to-End Mesh Network Solution

Canopy HotZone is the premier solution for delivering fixed and nomadic Metro WiFi coverage across the entire geographic areas of a wide range of campuses, enterprises and municipalities—including large and small cities, suburbs, towns and counties.

Municipal-Scale Architecture

Canopy HotZone's wireless mesh architecture was built from the ground up for municipal-scale deployment, and can provide hundreds of square miles of contiguous coverage. The network consists of three layers: the mesh access layer, the capacity injection layer and the backhaul layer. Canopy HotZone delivers outstanding performance across a wide range of applications, from video surveillance to VoIP to business and residential Internet access. The 2.4 GHz omni-directional design provides the capability to deliver the best performance while maintaining the lowest mesh router density and easiest installation and maintenance in the industry.

Canopy Technology

The Canopy® HotZone solution combines Motorola's Canopy wireless broadband system technology with powerful 802.11 based Zone Points. The Canopy platform is a robust, high-speed wireless solution delivering IP connectivity to mesh networks. Motorola point-to-point wireless Ethernet bridges and Canopy point-to-multipoint technologies are proven in more than 100 countries around the world.

Canopy Zone Points

Canopy HotZone provides three types of Zone Points, configured as either nodes or gateways, which automatically select the optimum path to the IP network.

- **Outdoor Zone Points.** Rugged Canopy Outdoor Zone Points are optimized for outdoor usage with an integrated variable power radio. The weatherized Canopy Outdoor Zone Points can be easily mounted on buildings or the community's existing streetlight and utility pole infrastructure.

- **Nomadic Zone Points.** Canopy Nomadic Zone Points are mounted in vehicles, creating a nomadic infrastructure that extends and expands the WiFi coverage area, providing seamless mobility throughout the network.

- **Indoor Zone Points.** Canopy Indoor Zone Points seamlessly mesh with Outdoor and Nomadic Zone Points to provide for easy extension of the network across enterprise, departmental and campus applications.

Wireless Adaptive Routing Protocol (WARP)

Canopy HotZone's innovative Wireless Adaptive Routing Protocol (WARP) is one of the industry's most scalable mesh routing algorithms, maximizing throughput and eliminating the need for per node wiring. WARP is a radio-agnostic wireless mesh routing protocol optimized for municipal-scale applications, relying on software rather than expensive radio hardware. WARP creates a self-healing wireless mesh that automatically self-organizes as Zone Points are added and backhaul capability is increased.

Network Monitoring and Management

Canopy HotZone has a powerful element management system that provides for complete network management from a single station. Capabilities include over-the-air provisioning, configuration and software updates, plus total network performance and problem monitoring, statistical capture and much more. The system can provide stand-alone management, or be integrated with SNMP compliant large-scale network management systems such as OpenView.

CANOPY **HOTZONE** SOLUTION
THE VISION IS METROPOLITAN-WIDE WIFI BROADBAND TODAY

SEAMLESS CONNECTIVITY THROUGHOUT AREA

INTERNET

CANOPY PTMP BACKHAUL

MOTOROLA PTP BACKHAUL

WI-FI CELL